

## CLAIMS

What is claimed is:

1. An optical contact module for connecting a single optical fiber for transmitting an optical signal to an optical device such as a light emitting device or a light receiving device, which comprises:

an optical device receiving member including an optical device receiving portion formed with an optical device receiving space for receiving the optical device therein from one end of the optical device receiving member, an optical fiber receiving portion formed with an optical fiber receiving space for receiving an optical fiber therein from the other end thereof, a contact hole having a predetermined diameter to communicate the optical device receiving portion with the optical fiber receiving portion, and a slit formed in the optical fiber receiving portion by removing a portion of an outer periphery of the optical fiber receiving portion by a predetermined length from the other end;

an optical fiber fixing cap including a receiving portion which has a taper formed lengthwise such that the inner diameter of the receiving portion can be decreased to radially press the optical fiber receiving portion formed with the slit when the optical fiber receiving portion of the optical device receiving member is to be received therein from one end of the optical fiber fixing cap, and a through-hole at the other end thereof so that the optical fiber can be inserted into the receiving portion; and

a fastening means formed on the outer periphery of the optical fiber receiving portion of the optical device receiving member and on an inner periphery of the receiving portion of the optical fiber fixing cap to detachably fasten the optical fiber fixing cap to the optical device receiving member.

2. The optical contact module according to Claim 1, further comprising:

a projection portion extending lengthwise from a distal end of the

optical device receiving portion of the optical device receiving member,

wherein the optical fiber receiving portion of the optical device receiving member is formed with a taper such that the outer diameter of the optical fiber receiving portion is increased from a distal end thereof, and a plurality of slits are formed circumferentially at a predetermined interval in the optical fiber receiving portion.

3. The optical contact module according to Claim 1, further comprising:  
an optical fiber supporting member which is made of an elastic material, has a through-hole for receiving the optical fiber therein and is inserted into the optical fiber receiving portion of the optical device receiving member.

4. The optical contact module according to Claim 3,  
wherein a step is formed due to the outer diameter of the optical device receiving portion of the optical device receiving member larger than that of the optical fiber receiving portion thereof, and  
the optical contact module further comprises an O-ring fitted around the outer periphery of the optical fiber receiving portion and interposed between the step and the optical fiber fixing cap.

5. The optical contact module according to Claim 1,  
wherein the fastening means comprises male threads formed on the outer periphery of the optical fiber receiving portion of the optical device receiving member and female threads formed on the inner periphery of the receiving portion of the optical fiber fixing cap.

6. The optical contact module according to Claim 3,  
wherein the fastening means comprises male threads formed on the outer periphery of the optical fiber receiving portion of the optical device receiving member and female threads formed on the inner periphery of the receiving portion of the optical fiber fixing cap.

7. The optical contact module according to Claim 1,  
wherein the fastening means comprises an annular coupling ridge protruding from the outer periphery of the optical fiber receiving portion of the optical device receiving member, and a coupling groove formed on the inner periphery of the receiving portion of the optical fiber fixing cap to receive the coupling ridge.

8. The optical contact module according to Claim 3,  
wherein the fastening means comprises an annular coupling ridge protruding from the outer periphery of the optical fiber receiving portion of the optical device receiving member, and a coupling groove formed on the inner periphery of the receiving portion of the optical fiber fixing cap to receive the coupling ridge.

9. The optical contact module according to Claim 2,  
wherein a pair of projection portions are formed on the optical device receiving member.

10. The optical contact module according to Claim 2, further comprising:  
an optical fiber supporting member which is made of an elastic material, has a through-hole for receiving the optical fiber therein and is inserted into the optical fiber receiving portion of the optical device receiving member.

11. The optical contact module according to Claim 2,  
wherein the fastening means comprises male threads formed on the outer periphery of the optical fiber receiving portion of the optical device receiving member and female threads formed on the inner periphery of the receiving portion of the optical fiber fixing cap.

12. The optical contact module according to Claim 4,  
wherein the fastening means comprises male threads formed on the outer periphery of the optical fiber receiving portion of the optical device receiving member and female threads formed on the inner periphery of the receiving portion of the optical fiber fixing cap.

13. The optical contact module according Claim 2,  
wherein the fastening means comprises an annular coupling ridge protruding from the outer periphery of the optical fiber receiving portion of the optical device receiving member, and a coupling groove formed on the inner periphery of the receiving portion of the optical fiber fixing cap to receive the coupling ridge.

14. The optical contact module according to Claim 4,  
wherein the fastening means comprises an annular coupling ridge protruding from the outer periphery of the optical fiber receiving portion of the optical device receiving member, and a coupling groove formed on the inner periphery of the receiving portion of the optical fiber fixing cap to receive the coupling ridge.